

Delivering Promises Realising True Potential

Corporate Presentation | May 2024

Forward Looking and Cautionary Statement (1/2)



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JSW Group Overview



Amongst India's leading Conglomerates with a turnover of US\$23 Bn¹



JSW Energy

- Power producer with 9.8 GW of generation portfolio by CY24,
- Targeting 20GW generation + 40GWh of Storage by FY30
- Market Cap: ~US\$ 11.9 Bn



Infrastructure

- Second largest commercial port operator with 170 mtpa capacity
- Operates environmental-friendly seaports & terminals
- Equity listing in Oct 2023, Market Cap: ~US\$ 6.2 Bn



Paints

- India's new age Paints company offering a path-breaking Any Colour at One Price
- State-of-the-art Facilities in Maharashtra and Karnataka



Sport

- Supporting Indian sports ecosystem
- Teams Owned: Bengaluru FC, Delhi Capitals, Haryana Steelers







- India's largest steel producer in terms of installed capacity
- Capacity of 29.7 mtpa, growing to 38.5 mtpa by FY25
- Targeting 50 mtpa capacity by FY31
- Market Cap: ~US\$ 25.1 Bn



Cement

- Current capacity of 18.6mtpa, with a medium term target of 25mtpa
- Product range includes PSC, GGBS, Concrete & Construction Chemicals



Ventures

- Early-stage, tech-focused, VC fund
- Portfolio: Purple, LimeTray, Homelane, CureSkin and Zvlov



Foundation

- Social development arm of JSW Group
- Positively impacts more than a million lives across India

JSW Energy: Transitioning towards green energy

Mission

Providing Reliable, Affordable and Sustainable power

Vision

To be a leading integrated power company with presence across value chain

FY2030 To become a 20 GW company and 40GWh Energy Storage

FY2050 To become carbon neutral by 2050

JSW Energy - Presence Across the Value Chain



Well placed to achieve 20 GW of generation capacity before 2030

Power Generation Thermal, Wind, 3.9 GW, 4.7 GW, 29% 35% Generation 13.3 GW Hydro, Solar, Ø\$ \$\mathref{\text{\tin}\text{\tetx{\text{\text{\text{\text{\texi}\text{\text{\texi}\text{\text{\texi}\text{\text{\texi}\text{\text{\\ti}\tittt{\text{\text{\text{\texi}\text{\texi}\text{\text{\text{\texi}\text{\text{\text{\tex 1.6 GW, 3.1 GW, 12% 23% **Total Locked in** 13.3 GW Installed 7.3 GW **Under Construction** 2.6 GW **Pipeline** 3.4 GW

Energy Storage

3.4 GWh of locked in capacity

Battery Storage

1.0 **GWh**









Energy Products & Services

Solar Module, WTG manufacturing & Green H2



Green Hydrogen & Derivatives

3,800 TPA

Wind Turbine
Manufacturing –
Technology licensing
agreement with SANY
Renewable Energy



Solar Module manufacturing

1.0 **GW**



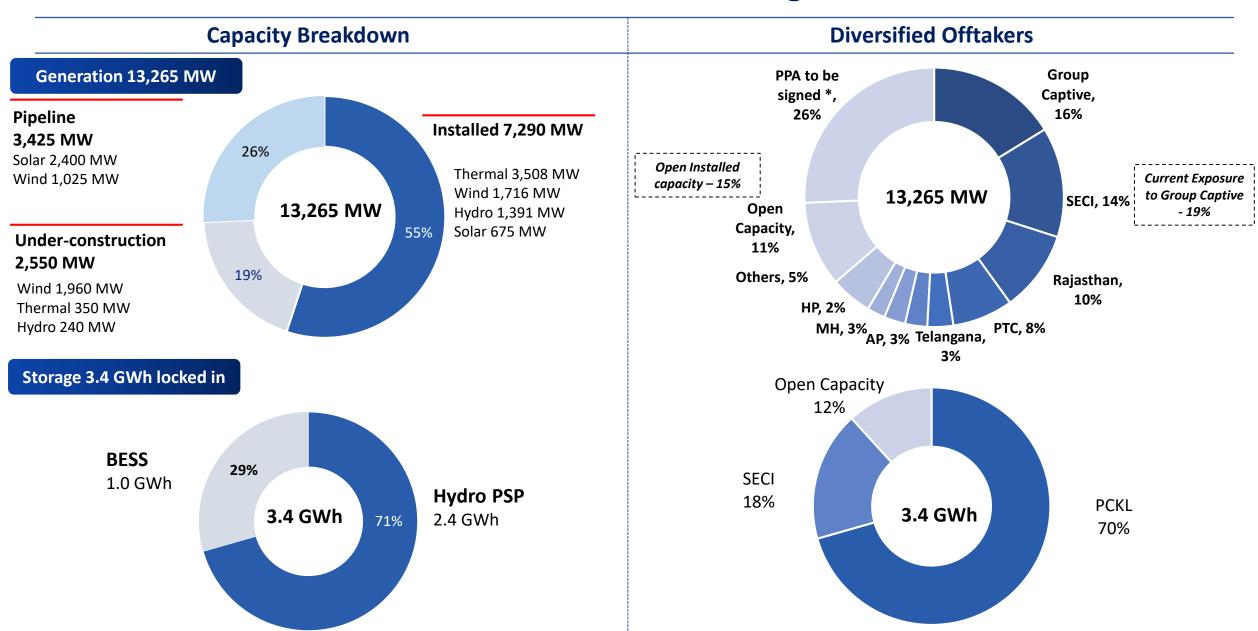






Well Diversified Portfolio – Focused on Maximising Cash Returns

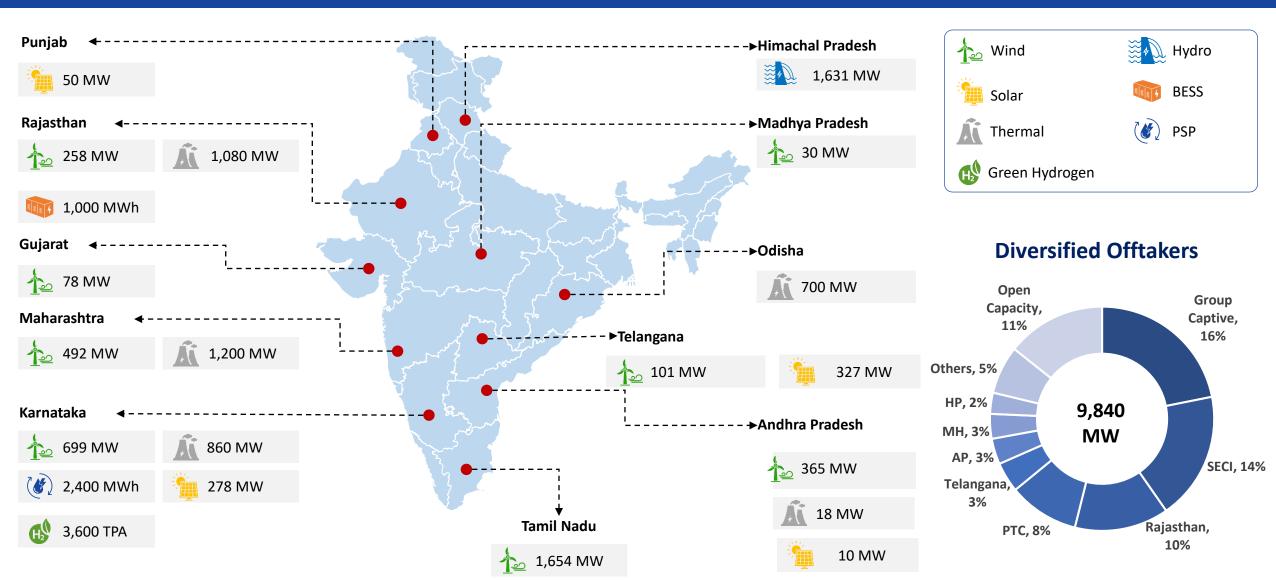




Developed a Pan India Footprint of Diverse Asset Base



Installed and Under Construction Capacity (9,840 MW)







Safety & Sustainability

Healthy Operations and Financials

Why JSW Energy?

JSW NEO - at a Glance

Appendix



Sustainability: Framework and Policies



17 Focus Areas with 2030 Targets from 2020 as Base Year



Climate Change:

Committed to being carbon neutral by 2050

Reduce our carbon emissions by more than 50%



Renewable Power:

Enhance the renewable power to 2/3rd of our Total Installed Capacity



Biodiversity:

No Net Loss for Biodiversity



Waste Water:

Zero Liquid Discharge



Waste

100% Ash (Waste) utilization



Water Resources:

Reduce our water consumption per unit of energy produced by



Operational Health & Safety



Supply Chain Sustainability



Resources



Employee Wellbeing



Social Sustainability



Air Emissions



Local Considerations



Business Ethics



Indigenous People



Cultural Heritage



Human Rights

Energy

Aligned to National & International Frameworks













Governance & Oversight by **Sustainability Committee**

Independent
Directors

Mr. Sunil Goyal

Ms. Rupa Devi Singh

1 Executive Director

Mr. Sharad Mahendra

ESG Ratings – best amongst peers

CDP*: A- (Leadership Level)

Sustainalytics: 23.2 (Medium Risk)

S & P Global (DJSI): 71/100

FTSE4Good Index constituent

Carbon Neutrality by 2050



Committed to set science based targets to keep global warming to 1.5°C under SBTi

Integrated Reporting since FY19











ESG Data book

Sustainability: Targets and Strategy



SD Targets		FY20 Actuals	Improvement (FY20 to FY30)	FY30 Targets	FY24 Actuals	Strategic Initiatives and Approach	
	Climate Change	 GHG Emissions tCO₂e/ MWh 	0.76	71%	0.215 *	0.627	 TCFD – Identified associated short tem, medium term and Long term risks Supply Chain Sustainability – development of Digital Platform for value chain partners under progress. Increased share of RE for decarbonization - Total RE operational capacity increases from 3,406 MW (Q4 FY23) to 3,780 MW (Q4 FY24)
	Water Security	 Specific fresh water intake (m³/MWh) 	1.10	46%	0.591	0.967	 Maintaining zero liquid discharge across operations Optimising utilisation of rain water harvesting system Installation of technology for operating cooling towers with higher Cycles of Concentration with modified chemical regime Reuse of treated effluent of Sewage Treatment Plan for horticulture
#	Waste	 Specific Waste (Ash) Generation (t/MWh) Waste Recycled - Ash (%) 	0.070 100	54%	0.032	0.049	 Integrated Strategy towards efficient waste management – Ash Management, recycling of waste water, handling hazardous waste through authorized recycler. Utilisation of low ash coal in Ratnagiri and Vijayanagar Re-utilisation of pond ash as well as Bottom ash in Boiler 45,000 MT Capacity Ash Silo constructed in Ratnagiti to export the Fly Ash through sea
—	Air Emissions	Specific process emissions(Kg/MWh) PM SOx NOx	0.16 1.78 1.01	67% 61% 63%	0.053 0.683 0.373	0.107 1.19 0.655	 route. About 19,300 MT of Fly Ash exported through sea route in FY24. Ensuring ESP (Electrostatic Precipitator) Fields availability Optimising Lime dozing system efficiency Process efficiency improvements
	Biodiversity	Biodiversity at our operating sites	-		Achieve 'no net loss' of biodiversity		 Implementation of Bodiversity Assessment plan at our operating plants in a phasewise manner to achieve No Net Loss of Biodiversity by 2030. Increased green cover across operations Barmer Plant won Prestigious CII-ITC Sustainability Award for Excellence in Biodiversity Implementation of Biodiversity Management plan at Barmer Plant.

JSW Energy Corporate Presentation - May'24

Sustainability: FY24 Performance



Key Highlights



- Increased share of renewable energy for deep decarbonisation
- Addition of 374 MW (FY24) renewable portfolio mix to reduce the GHG emission, a step towards our "Net Zero" commitment by 2050 or earlier.
- Continuous focus on process improvements to reduce GHG emission



- Maintained zero liquid discharge across operations
- Optimizing utilization of rain water harvesting system
- Reuse of treated effluent of Sewage Treatment Plant for horticulture
- Dry cleaning adopted instead of wet module cleaning resulted in significant saving of ground water (approx: 2400 m3 per month)



- Reutilising pond ash as well as bottom ash in Boiler.
- Continue 100% Ash utilization initiatives at all plants through tie-ups with cement factories & similar businesses



Emissions

- Ensuring ESP (Electrostatic Precipitator) Fields availability
- Process efficiency improvements being done in all plant locations
- Lime Dozing system availability and parameters optimization at Barmer to reduced air emissions

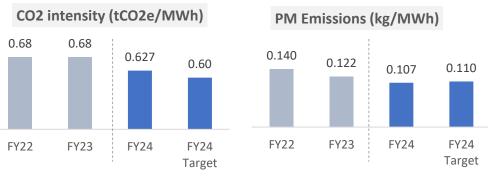


Biodiversity

- Biodiversity Assessment Phase 2 is completed for Ratnagiri Plant
- Increase in green cover at all operations to achieve 'No Net Loss' of Biodiversity by 2030.
- Barmer Plant won Prestigious CII-ITC Sustainability Award for Excellence in **Biodiversity**

Performance







Strong Board Oversight and Leadership





Mr. Sajjan Jindal Chairman & Managing Director



Mr. Parth Jindal Non-Executive, Non-Independent Director



Mr. Sharad Mahendra
Joint Managing Director & CEO



Mr. Pritesh Vinay
Director (Finance)



Mr. Ashok Ramachandran
Whole time Director & COO



Ms. Rupa Devi Singh Independent Director



Mr. Sunil Goyal
Independent Director



Mr. Munesh Khanna Independent Director



Mr. Rajeev Sharma Independent Director



Mr. Desh Deepak Verma Independent Director



Mr. Rajiv Chaudhri Independent Director

- Audit Committee
- Compensation & nomination & remuneration Committee
- Risk management Committee
- Stakeholder's relationship Committee
- Corporate social responsibility Committee
- Sustainability Committee
- Permanent invitees to Sustainability Committee

- Majority Independent Board: 6/11 Directors are Independent
- **▼** Fully Independent Audit and Compensation and Remuneration Committees

Our Core Principles



Accountability



Social Responsibility



Transparency



Environment



Integrity

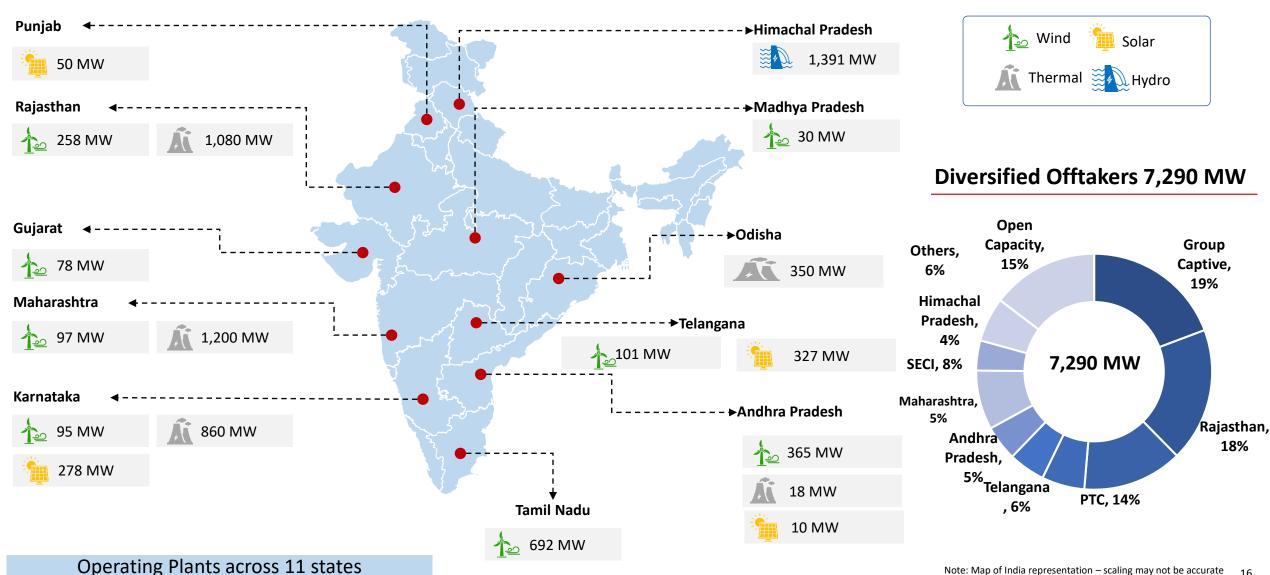




Operating Locations: Pan India presence



Current Operational Capacity (7,290 MW)



Healthy Operations and Financials



85%

Capacity under LT PPA

~85%

EBITDA contribution from LT

~28BUs

Net Generation

₹ 3,237Cr

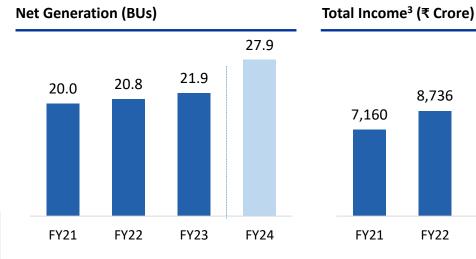
Cash PAT 1

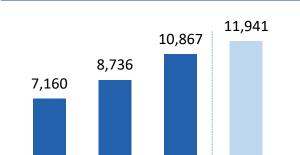
Figures are for FY24

- Steady operations and robust financial: Track record of strong yearly cash profits of ~₹3,237 Crores.
- High LT PPA tie-up rendering high cash flow visibility
 - Almost all LT PPA under two-part tariff (imported/domestic fuel cost/forex pass through)
 - Remaining Avg. Life of PPA: ~18 years
 - Remaining Avg. Life of Assets: ~24 years
- Diversified off-takers
 - All plants placed favorably in Merit Order Despatch
 - Hydro projects under 'must-run' status
 - Trade receivables (excl. Acquired RE Portfolio) at ₹ 1,429 Cr equaling to 54 receivable days as on Mar'31, 2024

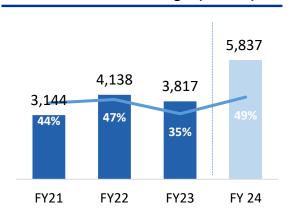
Business model with steady cashflow generation despite sectoral headwinds

FY21





EBITDA & EBITDA Margin (₹ Crore)

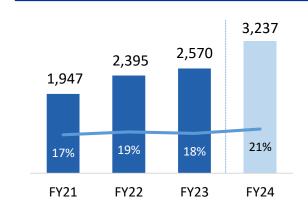


Cash PAT² (₹ Crore) and Return on Adj.Net Worth

FY 23

FY24

FY22



Robust balance sheet to support renewable-led growth



4.5x

Net Debt/EBITDA

1.3x

Net Debt/Equity

8.64%

Wt. average cost of debt *

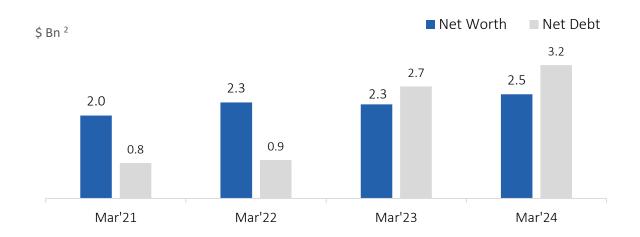
54

Receivable Days**

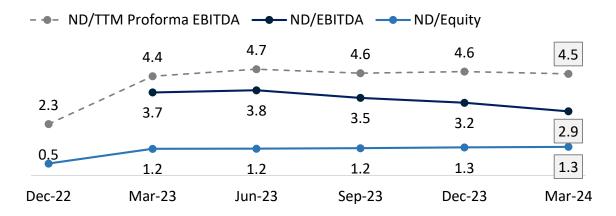
Figures as of Mar 31, 2024

- ✓ Strong Liquidity with healthy cash balances: ₹ 4,691 Crore as of Mar'31, 2024
- ✓ Financial flexibility enhanced by equity investments:
 - Holding 7Cr (70mn) JSW Steel shares of Value¹: ₹ 5,331 Cr
- ✓ Healthy Credit Ratings:
 - India Rating & Research: AA (Stable outlook)
 - ICRA Ltd: ICRA AA (Stable)
- ✓ Access to diverse pools of liquidity
- ✓ Operating portfolio generating healthy CF & mid-teen equity IRR
- ✓ Weighted average cost of debt* is 8.64% as of Mar 31, 2024

Robust balance sheet & strong cashflow available to pursue growth



ND/EBITDA for Operational Projects at 2.9x (Mar-24) ³



¹ Value of JSW Steel Share holdings as on Mar 31 2024

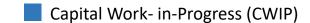
² Conversion based on USD = INR spot rate as of respective date

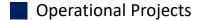
^{*} Including Acquired RE Portfolio's debt post refinancing and debt sizing package which is in place | ** Excl Acquired RE Portfolio receivables | # ND/Proforma EBITDA excluding debt on under-construction projects

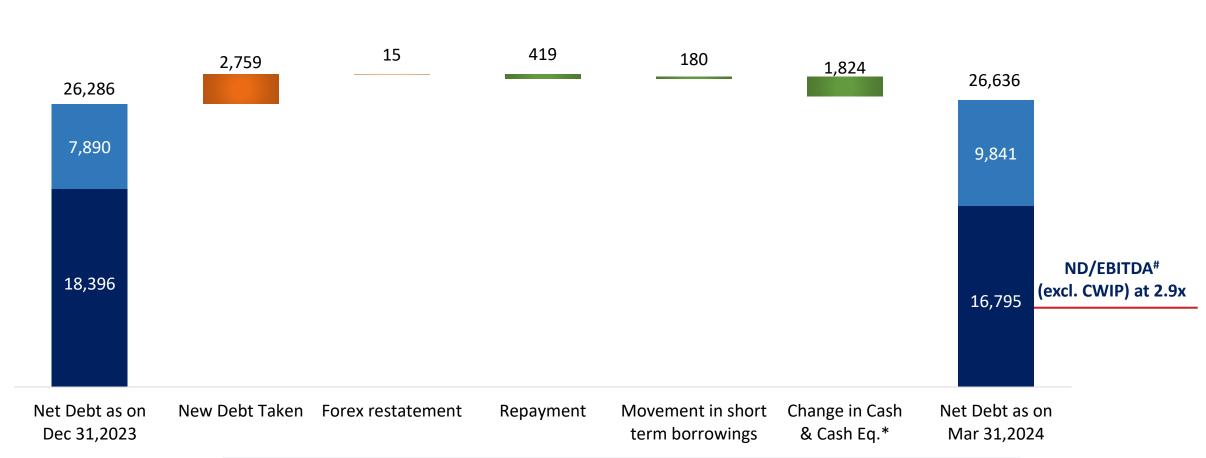
Net Debt Movement



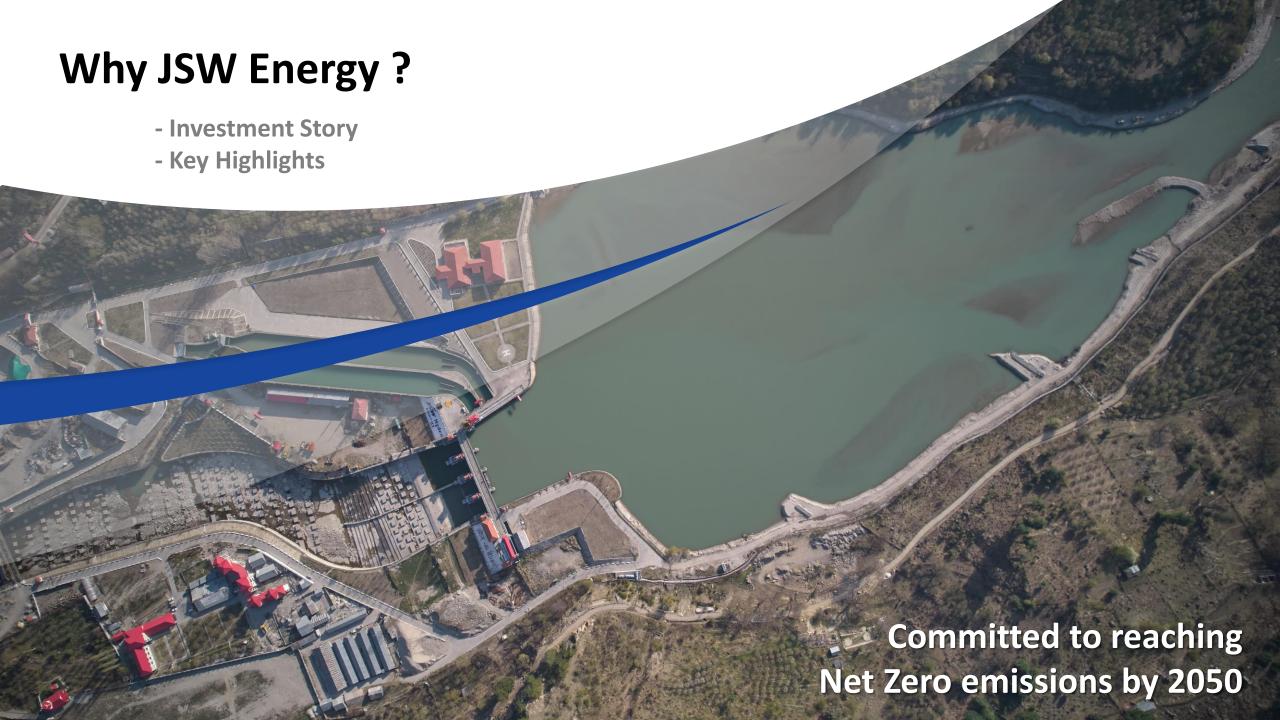






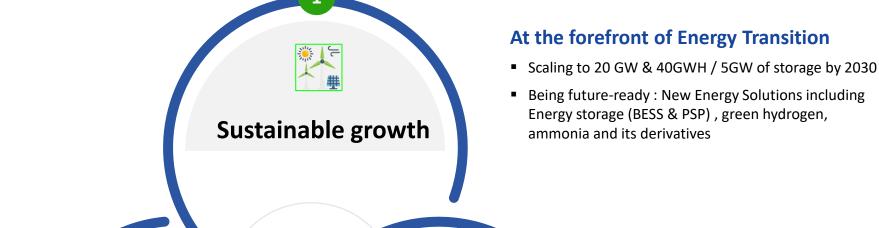


Sustainable Normalised Net Debt / EBITDA is within the guided range of 3.5x-4.0x



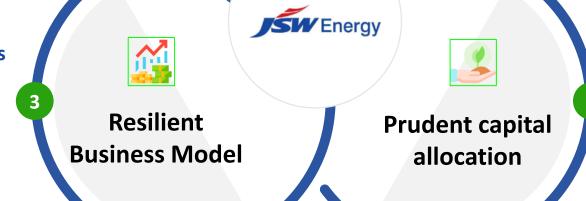
JSW Energy | Investment Story





Resilient Business, Consistent Performance and Strong financials

- Steady operations and robust financials
- Robust balance sheet and cash flows
- Internal accruals sufficient to support growth targets

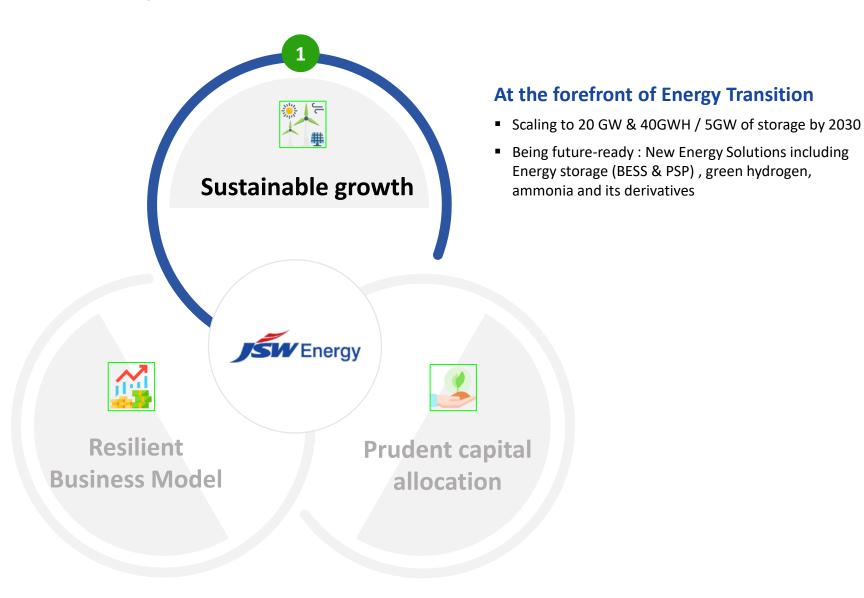


Efficient capital allocation track record

- Ensuring mid teen returns
- Proven project execution
- Sound operating efficiency characterized by one of the lowest O&M Cost/MW

JSW Energy | Investment Story

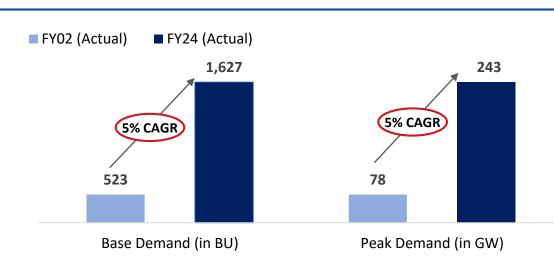




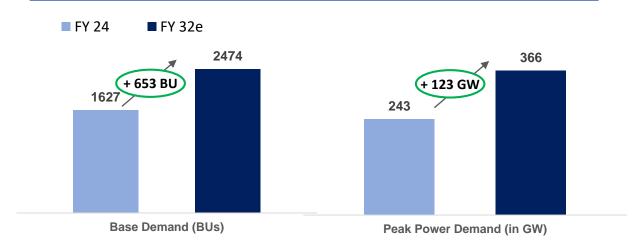
Significant Market Opportunity: Power Demand Growth to be met by RE JEW Energy



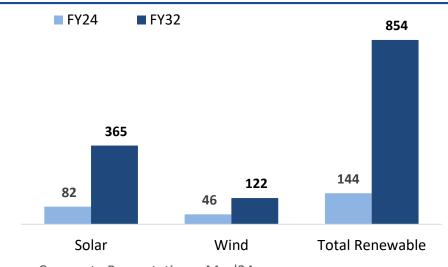
Historical Power Demand Growth



Similar growth expected in power demand over next decade



Demand to be met incrementally with Renewable Energy



Rapid Urbanization and universal electrification to drive power demand



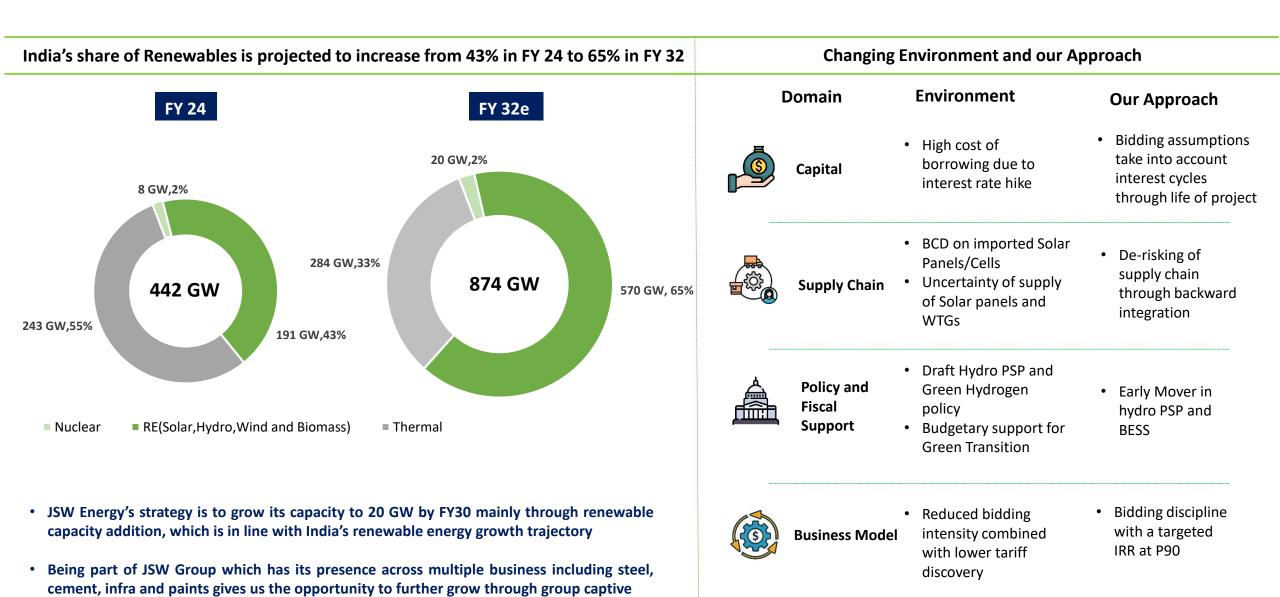
India is world's third largest power producer, however has a low per capita consumption (~1/3rd of world average), this provides huge opportunity for growth



Sustained economic growth has driven power demand in India, going forward, unlocking of demand from increased rural electrification and rapid urbanization to drive demand for power

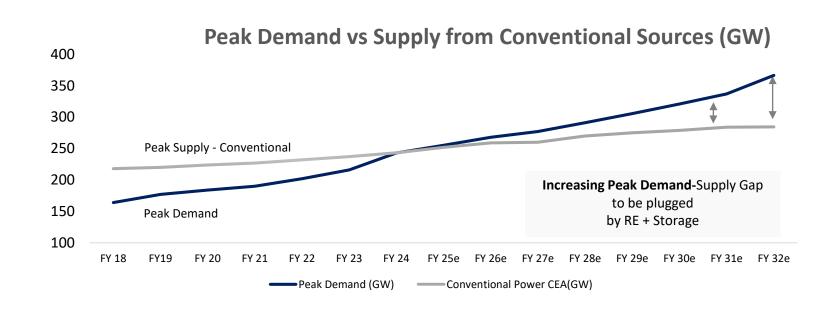
Participating in India's Green Transition

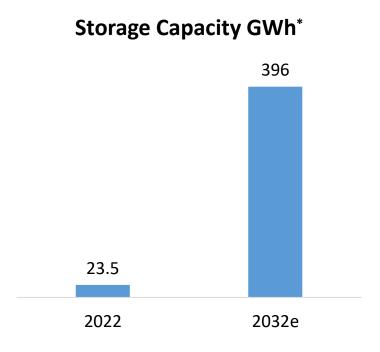




Energy Storage critical in India's Energy Transition







Renewable Energy + Storage Solutions required to plug increasing Peak Demand-Supply Gap going forward

- Peak Power Demand is expected to grow at a CAGR of ~6% between FY23-30
- Old & Inefficient thermal capacities to keep on retiring YoY
- Hence, Increasing gap between Peak Demand and Peak Supply from conventional power sources
 (Thermal+Nuclear+Hydro) will be needed to be plugged by supply from renewable + storage capacities

National Electricity Plan 2023

 Projections of the order of 396 GWh of energy storage requirement by 2031-32

Strategy 2.0 (2023-2030) – at glance



1 GW/ annum

PV Module

Solar Module manufacturing (W-C-M) under PLI scheme

2025



Forward integration of RE generation

20 GW GENERATION

CAPACITY

Locked in Sites with Solar

/ Wind Potential

2030

Backward Integration To PV modules

40 GWh/ 5GW

ENERGY STORAGE

Pump Hydro Storage **Battery Energy Storage**

2030



~3,800 TPA

ELECTRONS TO MOLECULES

Green Hydrogen Production, plant to be operational in 2025

2025



Growth driven by internal accruals

Normalised Net Debt/EBITDA to be in the range in 3.5x-4.0x

Balance Sheet Size to grow at 22% CAGR

Strategy 2.0 – 20 GW Generation + 40 GWh of Storage by FY30



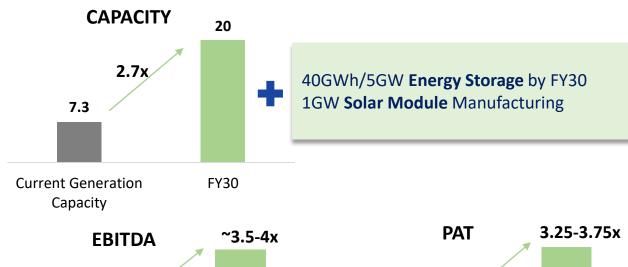
Pillars for Self sustainable and Integrated road map

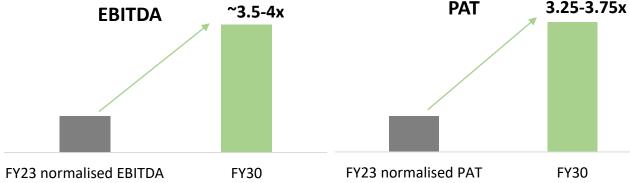
- Sustainable value creation focused on Cash Returns
- Internal Accruals and BS Headroom (no external capital)
- Organisational Capability and competency

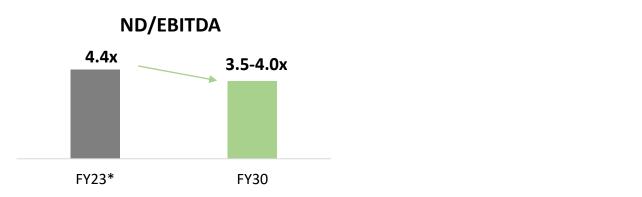
Growth Multipliers

Portfolio generating healthy cash flows & 21% cash return¹

- Steady operations and robust financials
 - Portfolio TTM Cash PAT of ₹3,237 Crore p.a.
 - Incremental cash accruals from commissioning of Under construction projects and integration of M&A deals
- ❖ 85% of portfolio tied-up under Long Term PPA
 - 85% of portfolio tied-up under Long Term PPA; Remaining Avg. Life of Assets/PPA: ~24years / ~18 years
- **Financial flexibility** enhanced by equity investments: JSW Steel shares: 7 Cr shares held (Value as on Mar 31, 2024: ₹ 5,331Cr)
- Healthy receivables management and low working capital cycle

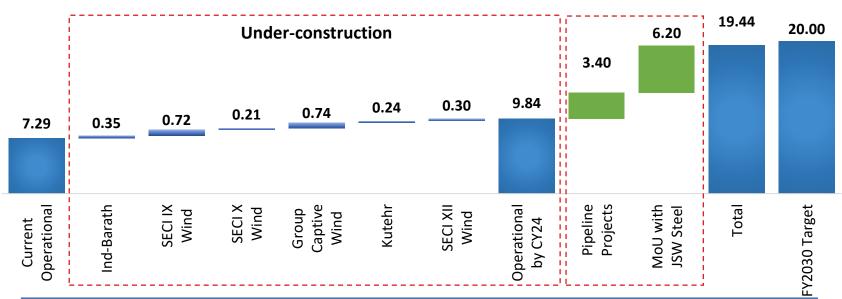




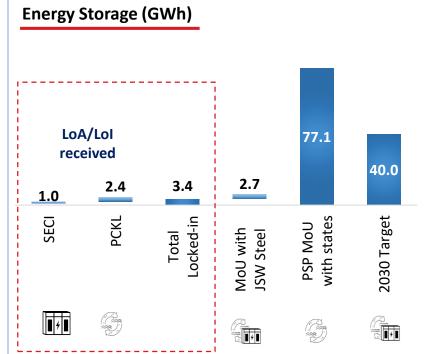


Robust Growth Pipeline

Generation (GW)



Plant (MW)	Target commissioning	PPA	Сарех
SECI IX (810)		25- year; SECI	
SECI X (454)	Progressive	25- year; SECI	Total: ₹19,360 Cr Committed : ~₹18,652 Cr Spent: ~₹15,046 Cr
Group Captive - JSW Steel (962) 225MW Solar operational	commissioning	25- year; JSW Steel	
Kutehr HEP (240)	Sept -2024	35- year; Haryana Discom	
Ind-Barath (350x 2)	Q1 FY25	Merchant	
SECI XII (300)	March 2025	SECI	~2,200 Cr

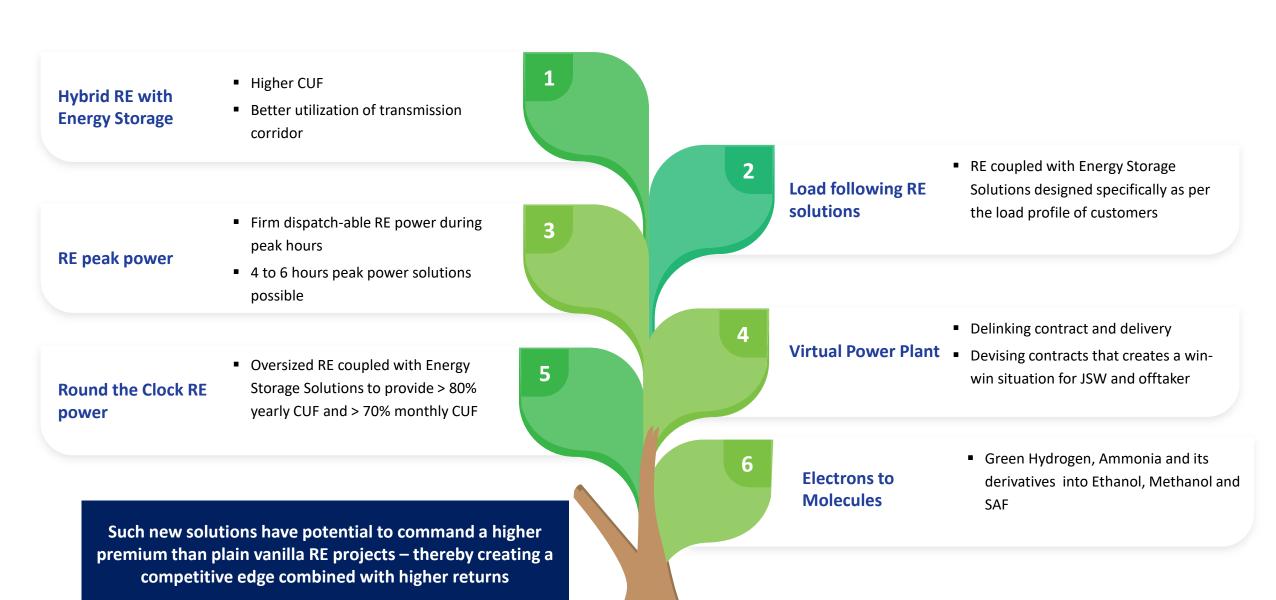


BESS – PPA signed for 250 MW/500 MWh with SECI

PSP – Lol received for 2.4 GWh from Power Company of Karnataka Limited

Energy Storage – Enabler for New RE based products and services





JSW Energy Corporate Presentation - May'24

Battery Storage (BESS) and Hydro Pump Storage (HPSP)



India's Storage Capacity Mix for FY 2031-32

National Electricity Plan 2023 BESS PSP 27 GW 47.2 GW **Base Case Energy** X 5 hours = X 6 hours = **Storage Capacity** 160 GWh 236 GWh 874 GW (FY 2031-32) **Total Generation (Inc. HPSP)** Considering base capacity as capacity mix for **Capacity Projection** 2021-22

Aiming 40 GWh and 5 GW Energy Storage by 2030

JSW Energy

Battery Energy Storage System (BESS)

- Build Own Operate Transfer (BOOT) with tenure of 12 years
- Battery Storage Purchase Agreement for 60% of the capacity with SECI and balance is open for sale
- Identified site is at Fatehgarh, Rajasthan
- Participate in ancillary market with the open capacity
- Expected commissioning by Q1FY25, site preparatory works started

Hydro Pump Storage (PSP)

- Received LoI for 2.4GWh (300 MW x 8 hours) PSP from Power Company of Karnataka Ltd (PCKL)
 - Target commissioning: 36 months from signing of PPA
 - PPA Duration: 40 years

Electrons to Molecules: Green Hydrogen Potential



Advantage India

Significant Hydrogen demand

Current demand ~6 MMT expected to grow to ~24 MMT by 2050

Huge RE potential

Existing RE capacity of ~191 GW (incl. Hydro)

Target – 50% of capacity share of **RE** by 2030

Low Tariffs

RE tariffs in India (INR ~ 2.5-3.0)

India's Import Bill

India is 3rd largest consumer of oil & gas, imports ~85% of oil and ~50% of Gas

Clean energy Commitment

GH adoption contributes to emission reduction & meet energy demand

Infrastructure build

Large part of India's infrastructure needs to be built out, allows better integration

JSW Energy



- Contracted India's largest Scale Commercial production Green H_{2} of (Capacity- 3,800 TPA). This is towards production of Green Steel
- Received LoA for 6.5 KTPA Green Hydrogen production facility from SECI under SIGHT Scheme
- Signed MoU with JSW Steel for 85-90 KTPA of Green Hydrogen & 720 KTPA of Green Oxygen by 2030.

Grey Hydrogen: Currently, more than 95% of hydrogen is produced from fossil fuels via carbon intensive processes.

Main production route



Steam Methane Reforming (SMR)



Coal Gasification

Characteristics





Intense Low CO_2 Cost Blue Hydrogen: Grey hydrogen whose CO₂ emitted during production is sequestered via carbon capture and storage (CCS)

Main production route



SMR + CCS



Coal Gasification + CCS

Characteristics



Low

 CO_2





Cost

Green Hydrogen: Low or zero-emission hydrogen produced using clean energy sources

Electrolysis using

Main production route



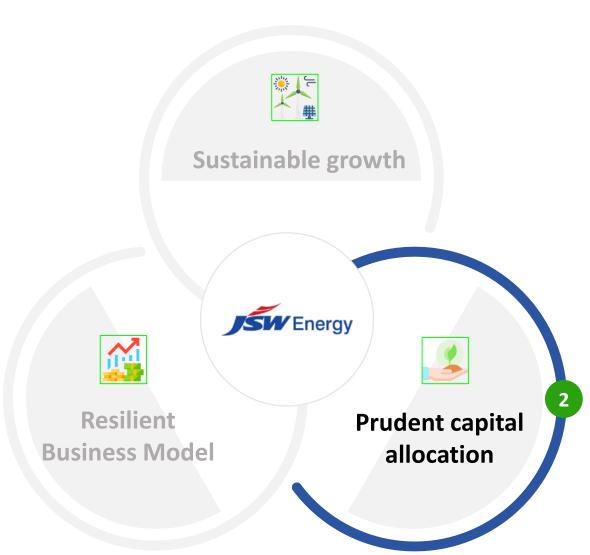
Characteristics

Zero CO_2

High Cost

JSW Energy | Investment Story





Efficient capital allocation track record

- Ensuring mid teen returns
- Proven project execution
- Sound operating efficiency characterized by one of the lowest O&M Cost/MW

Proven project execution and operational excellence...

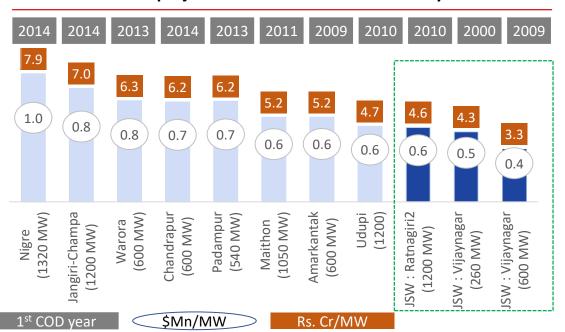


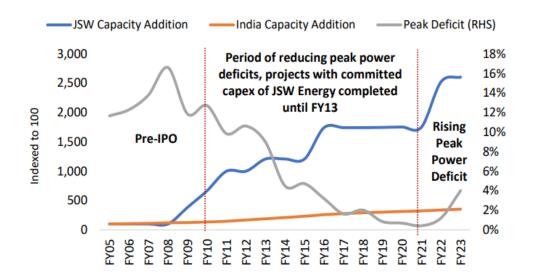
Prudent and consistent capital allocation strategy for growth over a 25 year history

Selective bidding to ensure mid teen returns

Successful integration of inorganic capacities

One of the lowest project execution cost in the industry





Sound operating efficiency characterized by one of the lowest O&M Cost/MW (₹ mn)

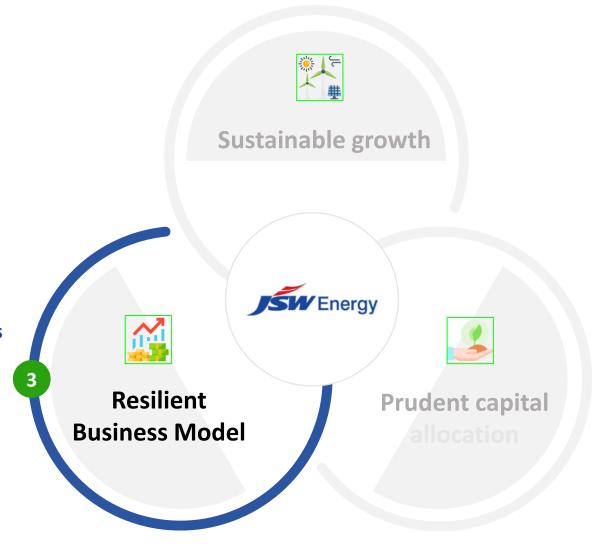


JSW Energy | Investment Story



Resilient Business, Consistent Performance and Strong financials

- Steady operations and robust financials
- Robust balance sheet and cash flows.
- Internal accruals sufficient to support growth targets



JSW Energy: Resilient Business Model



Opportunities

- India's Ambitious Target
 - 50 GW capacity bid per annum
 - JSW energy well placed to capitalize on FDRE and Energy Storage opportunities
- Group Captive opportunities with JSW Steel
 - Generation 6.2 GW
 - Energy Storage 2.7GW
 - Green Hydrogen 85,000-90,000 tonnes with associated RE solution
- Equipment Manufacturing WTG and Solar module manufacturing

Locked-in Generation 13.2 GW Locked-in Energy Storage 3.4 GWh

Capability

3.8 GW Organic Capacity Addition

- Proficiency in Executing large-scale projects across diverse generation modes
- Harnessing skilled manpower and cutting-edge intelligence to drive success in project bidding and implementation
- Early mover in Energy Storage and Green Hydrogen
- Track record of lowest capital expenditure /MW

Capital

Financial Strength

- Robust balance sheet
- Strong credit rating
- Low borrowing cost
- Track record of prudent capital allocation
- Successfully completed ₹ 5,000 Cr QIP
- Witnessed interest from marquee global and domestic investors



Robust Balance Sheet & Cashflows





Strong Financials

Particulars	As on March 31, 2024
Networth	₹ 20,832 Cr
Net Debt	₹ 26,636 Cr
Net Debt/TTM Proforma EBITDA	4.5x
Net Debt/TTM Proforma EBITDA (excl. under construction projects)	2.9x
Net Debt/Equity	1.3x
Wtd. Average Cost of Debt	8.64%
Cash PAT TTM	₹ 3,237 Cr

Healthy Credit Ratings and access to diverse pools of liquidity

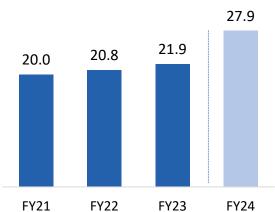
- India Rating & Research: IND AA (Outlook Stable)
- ICRA Ltd: ICRA AA/ Stable
- Strong Liquidity with healthy cash balances: ₹4,691 Cr*



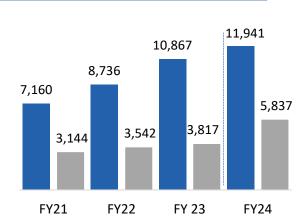
Steady Operations and Robust Financials



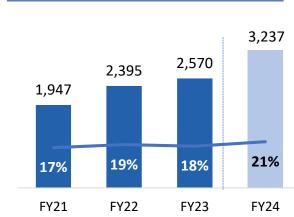




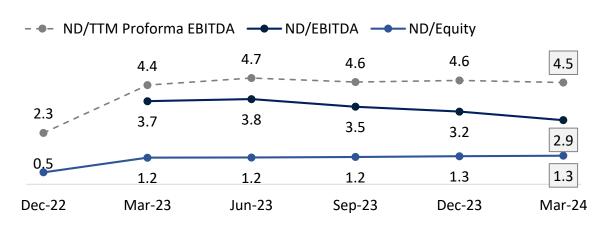
Total Income¹ and EBITDA (₹ Cr)



Cash PAT (₹ Cr) and Cash Returns



ND/EBITDA for Operational Projects at 2.9x



Healthy receivables days



Steady operations and robust financial

- 85% of portfolio tied-up under Long Term PPA; Remaining Avg. Life of Assets/PPA: ~24 years / ~18 years
- Track record of strong yearly cash profits and mid-teen equity returns

Financial flexibility

- Strong leverage ratio, Net Debt to operating EBITDA of 2.9x
- JSW Steel shares: 7 Cr shares held (Value as on Mar 31, 2024: ₹ 5,331Cr)

Receivables

- All plants placed favourably in States' Merit Order Dispatch
- Payment security mechanism in force for power tied under long term PPA with discoms

JSW Energy: Key Highlights





Proven Execution Excellence

- ✓ Proven project execution skills: Projects set-up in lowest cost & time
- ✓ Differentiated business strategy for growth to 20 GW, driven by Renewable
- ✓ Foraying in New Energy Platforms: Green Hydrogen, Energy Storage, Energy Products & Services



- ✓ Strong Focus on ESG Leadership band with 'A-' score in the 2023 CDP Climate Change rating
- ✓ Amongst the Highest rated power generation company in India by various independent ESG rating agencies DJSI 71/100
- ✓ To be Carbon Neutral by 2050; Committed to set science based emission reduction targets (SBTi)



- ✓ Sound operating efficiency characterized by one of the lowest O&M costs in the sector
- ✓ Barmer, Ratnagiri and Vijayanagar Plants awarded 'SWORD OF HONOUR' by British Safety Council



Steady EBITDA and Cash accruals

- √ 85% of total portfolio tied up with LT PPA providing steady EBITDA and Cashflow generation in FY24
- ✓ Two-part tariff structure mitigating fuel and forex risk



Healthy Receivables

- Receivables days at low levels in DSO terms.
- ✓ Favorable placement in Merit Order Despatch & diversified off-takers mitigate Receivable risk



Strong Balance Sheet

- ✓ 4.5x, Net Debt/EBITDA; 1.3x Net Debt/Equity Robust Balance Sheet
- Healthy debt metrics to be maintained while pursuing value accretive growth
- ✓ A healthy cash balance of ₹4,691 Cr and financial flexibility with JSW Steel equity shareholding
- ✓ Raised ₹ 5,000 Cr Growth Capital through QIP from marquee institutional investors to accelerate growth

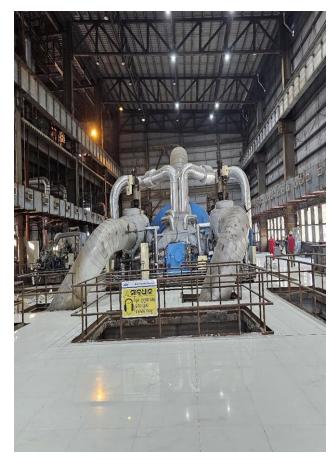


- ✓ Weighted average cost of debt at 8.64%
- ✓ Executed attractive refinancing and debt sizing package for Acquired RE Portfolio RE assets, cost saving of > ₹240 cr
- ✓ Raised a Rs 707 million green bond to refinance debt for hydro entity in May'21



Thermal Assets











Ind Barath 700 MW

Ratnagiri 1,200 MW

Barmer 1,080 MW

Vijayanagar 860 MW

JSW Energy - Corporate Structure

JSW Energy Limited 13,265 MW

JSW Neo Energy * 9,397 MW

Ratnagiri – 1,200 MW

Vijayanagar – 860 MW

Nandyal – 18 MW Solar – 10MW

Total - 2,088 MW

JSWEBL – 1,080 MW Ind-Barath – 700 MW **Hydro Entities**

Solar/Wind Entities

Products & Services

Energy Generation Portfolio

JSW Hydro Energy Limited (1,391 MW) (Karcham & Baspa)

JSW Energy (Kutehr) Limited (240 MW) JSW Renew Energy Limited (810 MW SECI-IX)

JSW Renew Energy

Eight Limited; and

JSW Renew Energy

Nine Limited

(1,025 MW SECI-XVI)

JSW Renew Energy Two Limited (454 MW SECI-X)

JSW Renew Energy Ten Limited (300 MW GUVNL) JSW Renewable Energy (Vijayanagar) Limited (866 MW Captive)

JSW Renew Energy Eleven Limited (700 MW SECI-XIII) JSW Renewable Energy (Dolvi) Limited (96 MW Captive)

JSW Renew Energy

Thirteen Limited

(700 MW NTPC)

(1,753 MW - Acquired)

Acquired RE portfolio

JSW Renew Energy (Raj) Limited (700 MW SJVN) JSW Renew Energy Three Limited SECI XII 300 MW

y JSW Renewable Energy (Coated) Limited (45 MW - Acquired)

Products & Services

BESS – SECI Pilot (500MW/1000MWh)

PSP

- Lol for 2.4 GWh
- MOUs signed for 80 GWh

Advanced high efficiency solar module (Awarded capacity under PLI)

Green Hydrogen (3,800 TPA) & Its Derivatives

Vijayanagar Solar Power Plant

Thermal Assets | FY24 Highlights



IIICIIIIai F	455615 F124		Energy			
Overview	Offtaker Profile		Operational Assets			
Total Thermal Capacity 3,858* MW	3,858 MW Group Captive, 30%	Rajasthan, 28% MSDECL, 8%	Ratnagiri	Ind - Barath		
	Installed Capacity		1,200 MW	1,080 MW	860 MW	700 MW Unit 1 (350 MW) operational
Operational Capacity 3,508* MW	PPA tied		1,105MW	1,105MW 1,080 MW		Merchant
	Fuel Type		Imported Coal	Lignite	Imported Coal	Domestic Coal
	LT		6,491 MUs (27% YoY)	6,329 MUs (-3% YoY)	2,242 MUs (-8% YoY)	-
Under Construction Ind-Barath	Net Generation (MUs)	Total	7,850 MUs (37% YoY)	6,329 MUs (-3% YoY)	4.067 MUs (15% YoY)	196 MUs
350 MW (Unit-2)		LT		75%/(78%)	88%/(92%)	-
(Onic 2)	PLF/(Deemed PLF)					

~72% of Current Installed Thermal Capacity of 3,508 MW is tied-up under Long-Term PPA

75%/(78%)

81%/(98%)

Total

58%/(60%)

63%/(70%)

Renewable Assets - 9.4 GW





JSW Energy – Corporate Structure

JSW Energy Limited 13,265 MW

> JSW Neo Energy * 9,397 MW (Installed – 3,772 MW)

Ratnagiri – 1,200 MW Vijayanagar – 860 MW

Nandyal – 18 MW

Solar - 10MW

Total - 2,088 MW

JSWEBL - 1,080 MW Ind-Barath – 700 MW **Hydro Entities**

Solar/Wind Entities

Products & Services

Energy Generation Portfolio

JSW Hydro Energy Limited (1,391 MW) (Karcham & Baspa)

JSW Energy (Kutehr) Limited (240 MW)

JSW Renew Energy Limited (810 MW SECI-IX)

JSW Renew Energy Two Limited (454 MW SECI-X)

(Vijayanagar) Limited

(866 MW Captive)

JSW Renew Energy **Eleven Limited** (700 MW SECI-XIII)

JSW Renewable Energy

JSW Renewable Energy (Dolvi) Limited (96 MW Captive)

Acquired RE portfolio (1,753 MW - Acquired) JSW Renew Energy Three Limited SECI XII 300 MW

JSW Renew Energy Eight Limited; and JSW Renew Energy Nine Limited (1,025 MW SECI-XVI)

JSW Renew Energy Ten Limited (300 MW GUVNL)

JSW Renew Energy Thirteen Limited (700 MW NTPC)

JSW Renew Energy (Raj) Limited (700 MW SJVN)

JSW Renewable Energy (Coated) Limited (45 MW - Acquired)

Products & Services

BESS – SECI Pilot (500MW/1000MWh) **PSP**

- · Lol for 2.4 GWh
- MOUs signed for 80 GWh

Advanced high efficiency solar module (Awarded capacity under PLI)

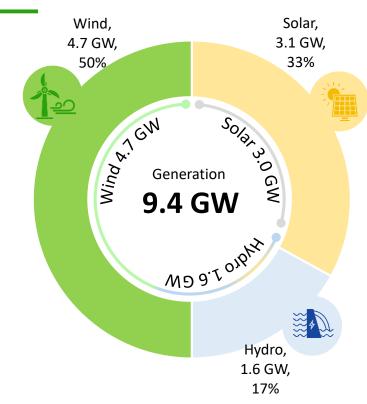
Green Hydrogen (3,800 TPA) & Its **Derivatives**

Vijayanagar Solar Power Plant

JSW Neo energy - Presence Across the Value Chain



Power Generation



Total Locked in	9.4 GW
Installed	3.8 GW
Under Construction	2.2 GW
Pipeline	3.4 GW

Energy Storage

3.4 GWh of locked in capacity

Battery Storage

1.0 **GWh**









Energy Products & Services

Solar Module, WTG manufacturing & Green H2



Green Hydrogen & Derivatives

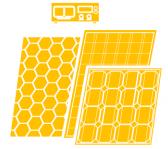
3,800 TPA

Wind Turbine Manufacturing – Technology licensing agreement with SANY Renewable Energy



Solar Module manufacturing

1.0 **GW**









JSW NEO Energy – At a Glance

Generation

9.4 GW

Renewable

Installed – 3,772 MW Under Construction – 2,200 MW Total – 5,972 MW by CY24

Pipeline – 3,425 MW

Additional MoUs

6.2 GW

Group Captive MoUs

Energy Storage

3.4 GWh

Energy Storage

BESS – SECI 500MW/1000MWh **Hydro Pump Storage** (HPSP) –

PCKL 300 MW/ 2400 MWH



2.7 GWh

Group Captive MoUs

80 GWh

Across 7 states

Energy Products

Backward Integration

Alloted 1 GW of solar wafer, cell and module (W-C-M) capacity under PLI scheme.

Electrons to Molecules

Received NoA for 6,500 TPA under SIGHT Program Contracted for 3,800 tonnes of Green Hydrogen.

Additional MoUs

Green H_2 - 85-90 KTPA Green O_2 - 720 KTPA

Group Captive MoUs

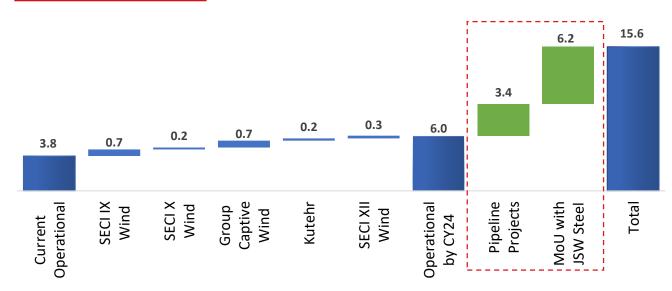




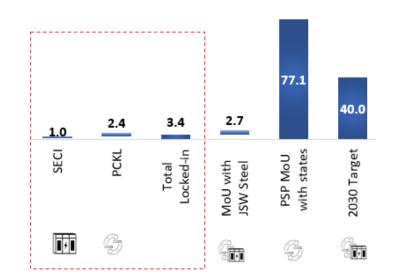
JSW Neo – Multiple Growth Drivers







Energy Products & Services



Green Hydrogen

Contracted 3,800 TPA with JSW Steel

- with JSW SteelLol for 6,500 TPA under SIGHT
- MoU with JSW Steel for 85k-90k TPA



PV module (W-C-M)

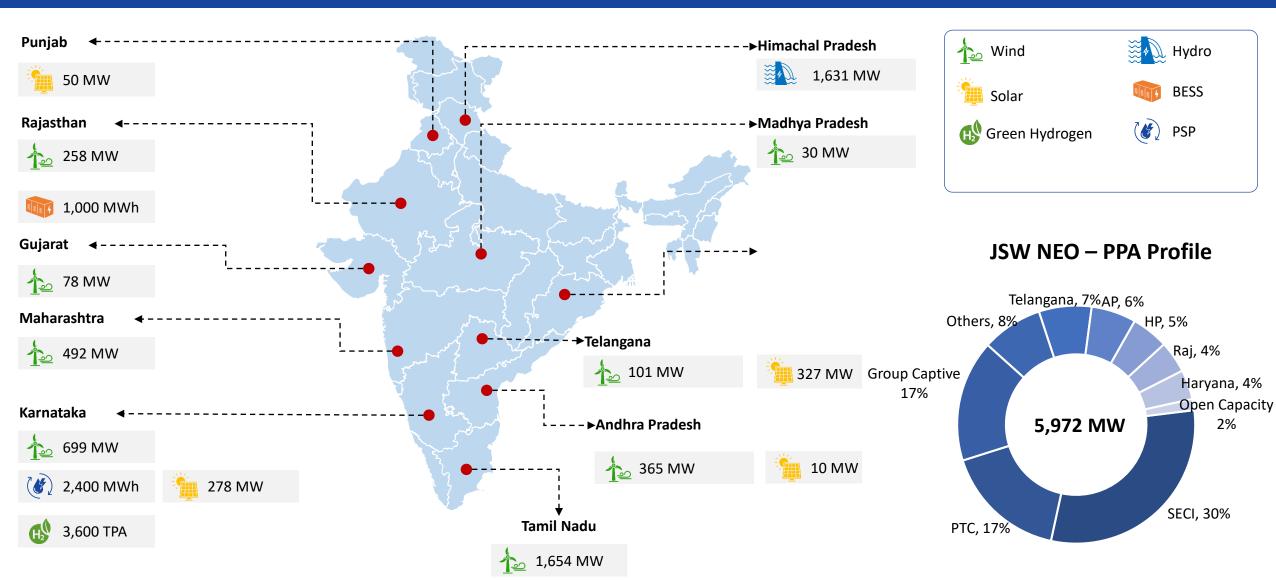
1 GW



JSW Neo - Footprint of Diverse Asset Base



Installed and Under construction (5,972 MW)



Energy Storage – Unique Value Proposition as an Early Mover



Battery Energy Storage System (BESS)

LoA received for 500MW/1000 MWh SECI project BESPA signed for 250MW/500 MWh with SECI in Mar-24

- Build Own Operate Transfer (BOOT) with tenure of 12 years
- Battery Storage Purchase Agreement for 60% of the capacity with SECI and balance is open for sale
- Identified site is at Fatehgarh, Rajasthan
- Participate in ancillary market with the open capacity
- Expected commissioning by Q1FY25, site preparatory works started

Particulars	SECI (BESS)
Tender capacity	500 MW / 1000 MWh
No. of hours backup	2 hours
Purchase agreement tenure	12 years
RTE	Min 85%
No of cycles per day	2

Hydro Pump Storage (PSP)

- Received LoI for 2.4GWh (300 MW x 8 hours) PSP from Power **Company of Karnataka Ltd (PCKL)**
 - Target commissioning: 36 months from signing of PPA
 - PPA Duration: 40 years
 - JSW's proven experience with managing the largest hydro portfolio in the private sector

Large Resources secured for ~80GWhr PSP/ 12.3 GW

State	Capacity (GW)
Karnataka	0.4
Maharashtra	3.0
Uttar Pradesh	1.7
Rajasthan	1.2
Andhra Pradesh	1.5
Telangana	1.5
Uttarakhand	3.0
Resources Secured	12.3

Green Hydrogen Opportunity – JSW Energy's Positioning



G

RTC RE Power at competitive prices

- Power is ~65-70% of variable cost for Green H₂ production
- Green H₂ a natural progression path for power companies banking on its competitive power cost
- JSWEL has RE resources with good CUF and profile along with large energy storage resources

R

Monetization of byproducts

- Valorization of Oxygen produced generating by-product credits
- O₂ produced in the Green H₂ to also be a part of the offtake agreement
- Low LCoE for Green H₂ provides optionality for manufacturing further downstream

Scalability

- JSWEL's backward integration to solar module manufacturing along with secured energy storage resources, provides optionality of scaling up its Green H₂ capacity going ahead
- derivatives

Co-location with Offtaker

- Co-location of **Hydrogen Complex** with JSW Steel's ecosystem
- Sharing of common infrastructure like water, roads, rail, etc.

N

Project Experience

- Ability to execute and build plants at costs well below industry standards
- Industry leading efficiency & high **Equity IRRs**

 H_2

Mutually Beneficial

- Green H₂ project winwin for JSWEL and JSW Steel
- Decarbonisation for hard to abate sector (Steel)
- Using Green H₂ increases the productivity of Direct Reduced Iron (DRI) process and will help offset Carbon Tax on Exports of Steel.

JSW Energy Corporate Presentation - May'24

Contracted Commercial Scale Green Hydrogen Project



Produce Green Hydrogen for Production of Green Steel



Green Power
25 MW RTC power
Secured land for plant



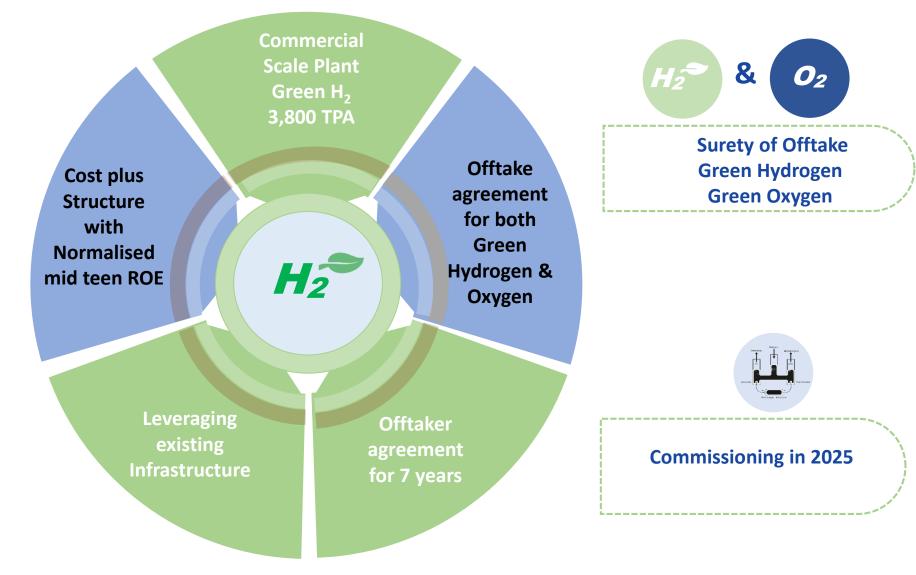
Power Transmission

Existing micro grid - No power

banking needed



Full amortization of capex in 7 years with normative mid-teen RoE



Solar Module Manufacturing – Supply Chain De-risking



NEED FOR BACKWARD INTEGRATION

Solar power is critical to transition towards green power

Tariff policy (BCD) restrictive, leading to high landed cost of cells and modules

Grid connected projects must use modules listed in ALMM

Supply reliability issue, limited domestic module capacity vs the requirement

1 GW under PLI



Wafer-Cell- Module

BACKWARD INTEGRATION AT JSW ENERGY

Allocated 1 GW of capacity under PLI for W-C-M

Supply Chain Derisking - strategic intent to utilize solar modules for captive usage

Eligible for ~₹ 320 Cr benefits under PLI scheme. Additional Incentives from State Government are under negotiation

Securing Resources – Location identified in Rajasthan, necessary approvals and ordering are in process

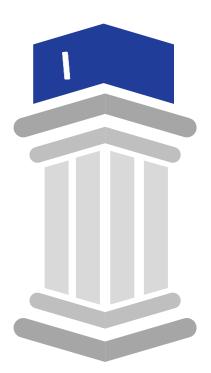
Capital expenditure of ~₹ 1,600 Cr

JSW Energy Corporate Presentation - May'24

JSW Neo Growth Framework



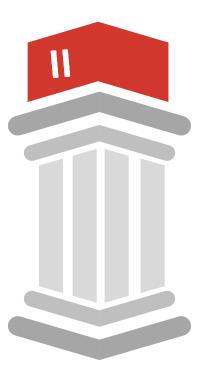
Value Accretive Business Model



Prudent selection of growth opportunities

- Bidding based on P90 generation assumption
- Conservative Interest rate assumptions
- Targeted selection- Targeting a niche segment of market offering healthy returns – Mid teen IRRs

Implementation De-risking



Life cycle approach

- Land acquisition, De-scoped project construction, power evacuation and O&M
- Power evacuation
- Proactive approach to get the PPA/PSA executed and tariff adoption

Execution Efficiency

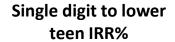


Group's project execution excellence

Fast execution while ensuring all safety guidelines

Growth Framework leading to industry-leading returns







Equity

IRRs

Current market returns

due to highly

competitive tariffs1

Pre-Bid Preparation

- Bidding with conservative assumptions
- Targeting a niche market segment offering healthy returns
- Pre-bid resources
 identification to reduce =
 uncertainty on land &
 connectivity

Project Execution

- No Turn key EPC contracts: instead creating value with split package approach
- Modular commissioning; Early onset of revenues
- Debt loading coinciding with revenue generation

Mid-teen IRR %



JSW Energy Target Returns

Targeting mid-teen post-tax equity IRRs

Potential Upside Levers Post COD

- Cost reductions due to Self O&M
- TechnologyImprovement
- Reducing Interest cost via refinancing



Realized Returns

Enhancement In Returns Realized

¹⁻ Company market analysis; COD: Commercial operations date; IRR: Internal Rate of Return

Ensuring Consistent Value Creation



Protecting Returns



Value Accretive Business Model

- Bidding based on P90 generation assumption
- Conservative Interest rate assumptions
- Targeted selection- Targeting a niche segment of market offering healthy returns – Mid teen IRRs



Implementation De-risking

- Land acquisition, De- scoped project construction, power evacuation and in-house O&M
- Proactive approach to get the PPA/PSA executed and tariff adoption



Execution Efficiency

 Group's project execution: Fast execution while ensuring all safety guidelines

Enhancing IRRs



De-scoped Project Execution

- No Turn key EPC contracts: instead creating value with split package approach
- Modular commissioning; Early onset of revenues



Attractive Financing Solutions

- · Debt loading coinciding with revenue generation
- · Reducing Interest cost via refinancing



Operational excellence

- · Cost reductions due to Self O&M
- Technology Improvement

Further Growth Opportunities



Green Energy Needs of JSW Group and C&I customers

 JSW Group has aggressive growth plans in Steel, Cement and Paints businesses providing opportunities for group captive projects



Power to X (PtX): Green Chemicals

- Green Hydrogen and Ammonia derivatives
- · Green Methanol and derivatives



Energy Storage: Hydro PSP and BESS



Value Accretive M&A opportunities

JSW Energy Corporate Presentation - May'24





Consolidated Financial Results



FY24	FY23	Particulars in ₹ Crore	Q4 FY24	Q4 FY23
11,941	10,867	Total Revenue	2,879	2,806
5,837	3,817	EBITDA	1,292	881
49%	35%	EBITDA Margin(%)	45%	31%
1,633	1,169	Depreciation	427	291
2,053	844	Finance Cost	533	233
2,150	1,924	Profit Before Tax	332	357
1,723	1,478	Profit After Tax	351	272
3,237	2,570	Cash Profit After Tax ¹	686	587
10.47	8.99	Diluted EPS ² (₹)	2.14	1.66

Operational Performance – Net Generation



Net Generation (MUs)									
Location (Current Capacity)		Capacity	Q4 FY24	Q4 FY23	Change YoY	FY24	FY23	Change YoY	
Location (Current Capacity)		%			%			%	
Ratnagiri (1,200 MW)	LT	91%	1,668	1,506	11%	6,491	5,123	27%	
hatilagili (1,200 ivivv)	Total	100%	2,097	1,752	20%	7,850	5,713	37%	
Barmer (1,080 MW)	LT	100%	1,754	1,730	1%	6,329	6,544	-3%	
Nijayanagar (960 MANA)	LT	37%	634	615	3%	2,242	2,434	-8%	
Vijayanagar (860 MW)	Total	100%	1,018	998	2%	4,067	3,550	15%	
Ind-Barath (350 MW)	Total	100%	196	NA	NA	196	0	NA	
Nandyal (18 MW)	LT	100%	23	2	NA	84	12	NA	
Total Thormal (2 FOR MANA)	LT	79%	4,080	3,853	6%	15,146	14,113	7%	
Total Thermal (3,508 MW)	Total	100%	5,088	4,482	14%	18,526	15,819	17%	
Lludge (1.245 NAVA)*	LT	97%	369	403	-8%	4,831	5,510	-12%	
Hydro (1,345 MW) [*]	Total	100%	369	403	-8%	4,913	5,595	-12%	
Solar (253 MW)	LT	100%	158	149	6%	555	412	35%	
Wind (338 MW)**	Total	100%	170	23	NA	531	29	NA	
Acquired RE - Wind (1,331 MW)***	Total	100%	414	5	NA	2,581	5	NA	
Acquired RE - Solar (422 MW)	Total	100%	199	5	NA	756	5	NA	
TOTAL	LT	91%	5,389	4,438	21%	24,400	20,075	22%	
TOTAL	Total	100%	6,397	5,067	26%	27,862	21,866	27%	

Entity-wise Financial Results



Entity-wise Revenue from Operations							
Particulars in ₹ Crore	Q4 FY24	Q4 FY23	FY24	FY23			
Standalone	1,236	1,647	5,129	5,739			
JSW Energy (Barmer)	809	748	2,880	3,026			
Ind-Barath	123	NA	127	NA			
JSW Hydro Energy	171	186	1,370	1,328			
Acquired RE Portfolio	294	4	1,574	4			
JSW Renewable Energy (Vijayanagar)	49	50	178	141			
JSW Renew Energy Two (SECI X)	38	6	129	7			
JPTL	17	19	69	71			
Consolidated*	2,756	2,670	11,486	10,332			

Entity-wise EBITDA (Including Other Income)							
Particulars in ₹ Crore	Q4 FY24	Q4 FY23	FY24	FY23			
Standalone	522	391	1,929	1,487			
JSW Energy (Barmer)	258	244	913	908			
Ind-Barath	30	NA	31	NA			
JSW Hydro Energy	136	134	1,304	1,170			
Acquired RE Portfolio	244	3	1,403^	3			
JSW Renewable Energy (Vijayanagar)	45	77	163	140			
JSW Renew Energy Two (SECI X)	36	5	123	5			
JPTL	16	18	69	70			
Consolidated*	1,292	881	5,837	3,817			

Cash Returns on Adjusted Net Worth



₹ Cr (Unless mentioned otherwise)

Quarter ended	Jun-22	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24
Reported PAT	560	466	180	272	290	850	231	351
Add: Depreciation	289	294	295	291	398	409	400	427
Add/(less): Deferred Taxes	84	42	14	24	55	89	(4)	(92)
(Less): Dividend Received	-	(122)	-	-	-	(24)	-	-
Add/(less): One-offs*	(120)	0	-	-	-	(144)	-	-
Cash PAT	813	681	489	587	743	1,180	628	686
Cash PAT (TTM)	2,697	2,767	2,625	2,570	2,500	2,999	3,138	3,237
Adjusted Net Worth**	12,952	13,491	13,446	14,177	14,061	14,859	15,336	15,501
Cash Returns on Net Worth (%)	21%	21%	20%	18%	18%	20%	20%	21%

Strong cash returns of >20% translates to TTM cash profits of >₹3,200 Cr

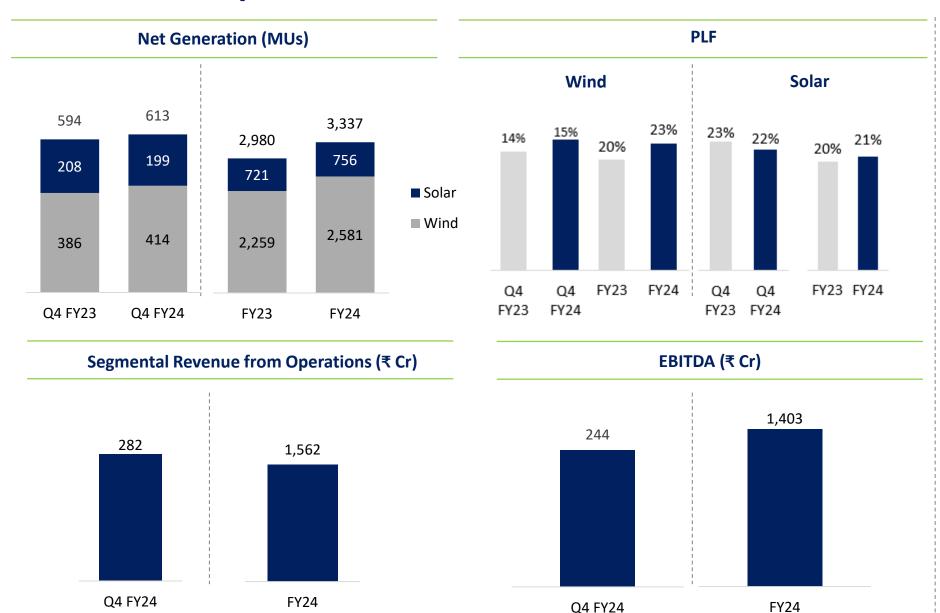
^{*}Exceptional items ₹ 120 Cr represents reversal of loss allowance made in earlier years on loan given to a party; ₹144 Cr for Sep-23 represents after-tax effects of Hydro True-up

^{**} Adjustment in net worth by excluding the value of shares of JSW Steel



JSW Neo - Acquired RE Portfolio





Operational Highlights

- Net generation increased 3% YoY in Q4 FY24 driven by higher machine availability in wind, partly offset by lower solar radiation
- For FY24 net generation increased 12% YoY with focused interventions

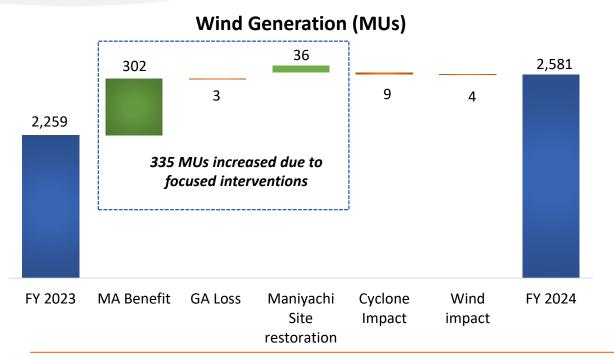
Financial Highlights

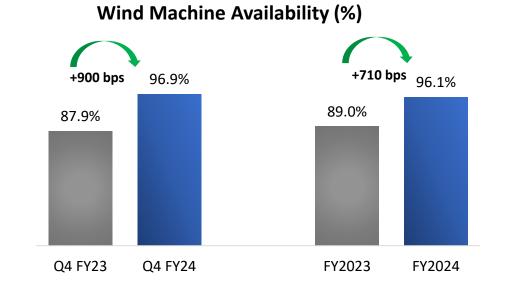
- During Q4 FY24 revenue of ₹282 Cr resulting in EBITDA of ₹244 Cr
- For FY24, Revenue at ₹ 1,562 Cr and EBITDA stood at ₹ 1,403 Cr

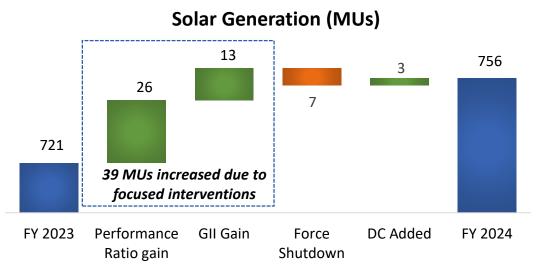
[•] FY24 generation and EBITDA are on proforma basis as two SPVs were acquired during Q1FY24 Q4 FY23 & FY23 numbers are unaudited and on proforma basis 63

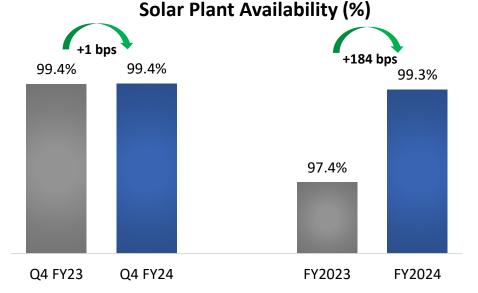
Acquired RE – FY24 Performance Improvement On Track











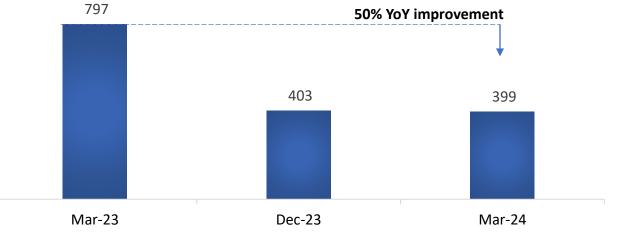
Acquired RE Wind (Chakla Maharashtra)

Receivables Cycle Improving

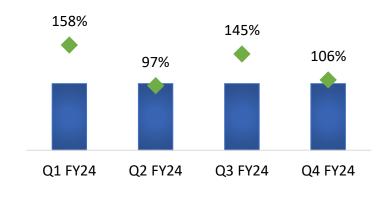


Strong collection in Acquired RE Portfolio's Receivables*





Focused O&M Interventions leading to strong billing/collection growth



Strong generation and billing growth

Continued focus on collection efficiency supports further reduction in the receivables

Billing (Indexed to 100) • Collection Including LPS